AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior listings and versions:

1 to 7. (canceled).

8. (currently amended): A method of generating a density calibration curve, comprising the steps of

(a) providing an assembly ~~according to claim 1~~ comprising an x-ray film holder; x-ray film and a wedge-shaped calibration phantom having length (L) and varying thickness (T) along the length;

(b) ~~to produce~~ producing an x-ray image of an anatomical structure, wherein the x-ray image comprises the calibration phantom;

~~(b)~~ (c) measuring attenuation at a multitude of points in the x-ray image of the calibration phantom, wherein each point is at known distance from a selected part of the phantom;~~, thereby~~

(d) measuring attenuation of at least one point of known density in the x-ray image of the anatomical structure; and

(e) generating a calibration curve that describes the relationship between ~~measured~~ attenuation measured in (c) and (d) and material thickness.

9. (currently amended): A method of generating a density calibration curve, comprising the steps of

(a) providing an assembly ~~according to claim 7~~ comprising an x-ray film holder; x-ray film and a wedge-shaped calibration phantom having length (L) and varying thickness (T) along the length and wherein the thickness of calibration phantom varies non-linearly along its length;

(b) ~~to produce~~ producing an x-ray image of an anatomical structure, wherein the x-ray image comprises the calibration phantom;

(c) ~~(b)~~ ~~generating~~ providing an expected calibration curve for the non-linear calibration phantom; ~~and~~

(d) ~~(c)~~ measuring attenuation at a multitude of points in the x-ray image of the calibration phantom;

(e) measuring attenuation of at least one point of known density in the x-ray image of the anatomical structure; and

(e) ~~(d)~~ aligning the points measured in steps ~~(c)~~ (d) and (e) with the expected calibration curve generated in step (c) ~~(b)~~, thereby generating a calibration curve for the image.

10. (original): The method of claim 8, further comprising the step of translating the calibration curve describing thickness into a curve describing calcium concentration.

11. (original): The method of claim 10, wherein the calibration phantom comprises aluminum and the calibration curve describes aluminum thickness.

12. (original): The method of claim 9, further comprising the step of translating the calibration curve describing thickness into a curve describing calcium concentration.

13. (original): The method of claim 12, wherein the calibration phantom comprises aluminum and the calibration curve describes aluminum thickness.

14. (original): A method of generating a reference calibration curve, comprising the step of calculating the average of calibration curves obtained according to the method of claim 8.

15. (original): A method of generating a reference calibration curve, comprising the step of calculating the average of calibration curves obtained according to the method of claim 9.

16. (currently amended): A method of generating a density calibration curve, comprising the steps of

(a) generating a digital x-ray image of an anatomic structure that includes a wedge-shaped calibration phantom having length (L) and varying thickness (T) along the length;

(b) generating an expected calibration curve; and

(c) measuring attenuation at a multitude of points in the x-ray image ~~of the~~ including the calibration phantom;

(d) measuring attenuation of at least one point of known density in the x-ray image of the anatomical structure; and

~~(d)~~ (e) aligning the points measured in steps (c) and (d) with the expected calibration curve generated in step (b), thereby generating a calibration curve for the image.

17. (original): The method of claim 16, further comprising the step of translating the calibration curve describing thickness into a curve describing calcium concentration.

18. (original): The method of claim 17, wherein the calibration phantom comprises aluminum and the calibration curve describes aluminum thickness.

19 to 24. (canceled).

25. (original): The method of claim 8, wherein the x-ray image is a dental x-ray.

26. (currently amended): The method of claim 8, wherein the calibration curve ~~said comparing~~ is ~~performed~~ generated in a network environment.

27. (canceled).

28. (currently amended): A method of diagnosing osteoporosis comprising the step of analyzing an x-ray image obtained by the method of claim 8 ~~1~~, wherein if the bone mineral density is below a reference standard, osteoporosis is diagnosed.

29. (currently amended): A method of treating osteoporosis comprising diagnosing osteoporosis according to the method of claim 28 and administering one or more anti-resorptive agents or one or more anabolic agents.

30. (canceled).

31. (new): The method of claim 8, wherein, in step (d), the at least one point of known density in the anatomical structure is in muscle, fat, or air.

32. (new): The method of claim 31, wherein the fat is subcutaneous fat.

33. (new): The method of claim 9, wherein, in step (e), the at least one point of known density in the anatomical structure is in muscle, fat, or air.

34. (new): The method of claim 33, wherein the fat is subcutaneous fat.